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MAIL CERTIFICATE

I hereby certify that this communication is being deposited with the United States Postal Service via First Class Mail under 37 C.F.R. § 1.8 on the date indicated below addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

9/05/2003
Date of Deposit

Laurie Lamoureux
Laurie Lamoureux

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: AGEE *ET AL.*

APPLICATION NO.: 09/920,903

FILED: AUGUST 3, 2001

FOR: **HIGHLY BANDWIDTH EFFICIENT
COMMUNICATIONS**

EXAMINER: NOT ASSIGNED

ART UNIT: 2631

CONF. No: 8061

**Second Supplemental Information Disclosure Statement Within Three
Months of Application Filing or Before First Action – 37 C.F.R. § 1.97(b)**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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Sir:

1. Timing of Submission

This information disclosure is being filed within three months of the filing date of this application or date of entry into the national stage of an international application or before the mailing date of a first Office action on the merits, whichever occurs last [37 C.F.R. § 1.97(b)]. The references listed on the enclosed Form PTO-1449 (modified) may be material to the examination of this application; the Examiner is requested to make them of record in the application.

2. Cited Information

☒ Copies of the following references are enclosed:

- ☒ All cited references
- ☐ References marked by asterisks
- ☐ The following:

- ☐ Copies of the following references can be found in parent U.S. Application No. :
 - ☐ All cited references
 - ☐ References marked by asterisks
 - ☐ The following:
- ☐ The following references are not in English. For each such reference, the undersigned has enclosed (i) a translation of the reference; (ii) a copy of a communication from a foreign patent office or International Searching Authority citing the reference, (iii) a copy of a reference which appears to be an English-language counterpart, or (iv) an English-language abstract for the reference prepared by a third party. Applicant has not verified that the translation, English-language counterpart or third-party abstract is an accurate representation of the teachings of the non-English reference, though, and reserves the right to demonstrate otherwise.
 - ☐ All cited references
 - ☐ References marked by ampersands
 - ☐ The following:

3. Effect of Information Disclosure Statement (37 C.F.R. § 1.97(h))

This Information Disclosure Statement is not to be construed as a representation that: (i) a search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the cited information is, or is considered to be, material to patentability. In addition, applicant does not admit that any enclosed item of information constitutes prior art to the subject invention and specifically reserves the right to demonstrate that any such reference is not prior art.

4. Fee Payment

No fees are believed due because this Information Disclosure Statement is being filed before the mailing date of the first Office Action.

- ☐ Applicant further submits that no fee is due in light of the following certification under 37 C.F.R. § 1.97(e) (check only one):
 - ☐ In accordance with 37 C.F.R. § 1.97(e)(1), the undersigned hereby states that each item of information submitted herewith was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement; or

- ☐ In accordance with 37 C.F.R. § 1.97(e)(2), the undersigned hereby states that no item of information submitted herewith was cited in a communication from a foreign patent office in a counterpart foreign application, or, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c), more than three months prior to the filing of this statement.

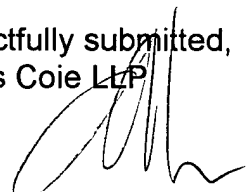
However, should the Commissioner determine that fees are due in order for this Information Disclosure Statement to be considered, the Commissioner is hereby authorized to charge such fees to Deposit Account No. 50-0665.

5. Patent Term Adjustment (37 C.F.R. § 1.704(d))

- ☐ The undersigned states that each item of information submitted herewith was cited in a communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this statement. 37 C.F.R. § 1.704(d).

Date: 9/5/03

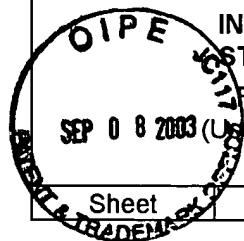
Respectfully submitted,
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Form PTO-1449 (Modified)
(Use several sheets if necessary)

COMPLETE IF KNOWN

Application Number	09/920,903
Confirmation Number	8061
Filing Date	August 3, 2001
First Named Inventor	Brian G. Agee
Group Art Unit	2631
Examiner Name	
Attorney Docket No.	101948023US21

Sheet 1 of 5

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	U.S. Patent or Application		Name of Patentee or Inventor of Cited Document	Date of Publication or Filing Date of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		NUMBER	Kind Code (if known)			
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		4,249,181		Lee	02/03/1981	
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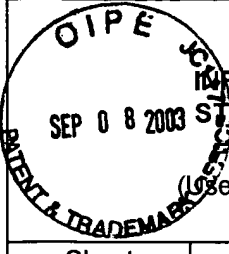
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Sheet	2	of	5		

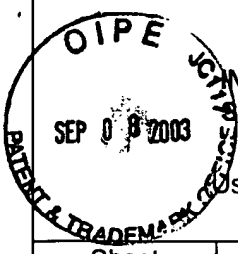
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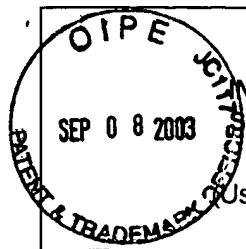
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Sheet	4	of	5
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		NUMBER	Kind Code (if known)			
		US 2002/0034217; atty. docket no. 101948046US3	A1	Zhang	Pub. Date 03/21/2002	
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		U.S. Application No. 10/435,304; atty. docket no. 101948025US6		Alamouti et al.	Filed 05/08/2003	RECEIVED SEP 10 2003 Technology Center 2600
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		Office	NUMBER	Kind Code (if known)				
		EP	0 490 509	B1	Northern Telecom Ltd.	06/17/1992		
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		Office	NUMBER	Kind Code (if known)				
		EP	0 685 973	A2	AT&T Corp.	12/06/1995		
		EP	0 690 593	A2	Mitsubishi Denki Kabushiki	01/03/1996		
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OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published.	T
		CHAN et al., "Efficient Frequency Assignments Scheme for Intermodulation Distortion Reduction in Fiber-Optic Microcellular Systems," Electronic Letters, October 27, 1994, pp. 1831-1832, Vol. 30, No. 22, IEEE, Stevenage, UK	
		GINER, V.C., "An Approximate Analysis of TDMA Out-of-Slot Random Access Protocols for Microcellular Mobile Communications," Int'l Journal of Wireless Information Networks, January 1996, pp. 41-53, Vol. 3 no. 1, XP002077581	
		OJANPERA et al., "Frames-Hybrid Multiple Access Technology," 1996 IEEE 4 th Int'l Symposium on Spread Spectrum Techniques, 22-25 September, 1996, Vol. 1, pp. 320-324	
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